

# **Exhibit 32**

1 STATE OF WISCONSIN : CIRCUIT COURT : MANITOWOC COUNTY  
2 BRANCH 1

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3 STATE OF WISCONSIN,

4 PLAINTIFF, JURY TRIAL  
5 vs. TRIAL - DAY 10  
Case No. 05 CF 381

6 STEVEN A. AVERY,

7 DEFENDANT.

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8 **DATE:** FEBRUARY 23, 2007

9 **BEFORE:** Hon. Patrick L. Willis  
10 Circuit Court Judge

11 **APPEARANCES:** KENNETH R. KRATZ  
Special Prosecutor  
12 On behalf of the State of Wisconsin.

13 THOMAS J. FALLON  
Special Prosecutor  
14 On behalf of the State of Wisconsin.

15 NORMAN A. GAHN  
Special Prosecutor  
16 On behalf of the State of Wisconsin.

17 DEAN A. STRANG  
Attorney at Law  
18 On behalf of the Defendant.

19 JEROME F. BUTING  
Attorney at Law  
20 On behalf of the Defendant.

21 STEVEN A. AVERY  
Defendant  
22 Appeared in person.

23 **TRANSCRIPT OF PROCEEDINGS**

24 Reported by Diane Tesheneck, RPR

25 Official Court Reporter

1 A. Correct.

2 ATTORNEY GAHN: I would ask if Detective  
3 Wiegert would bring you Exhibit 325. It's the Pap  
4 smear of Teresa Halbach.

5 Q. Now, we have already identified that exhibit as  
6 the Pap smear of Teresa Halbach; is that correct?

7 A. Yes.

8 Q. What is a Pap smear?

9 A. As I understand it, it is a sample of cells from  
10 a woman's cervix. It is used for medical testing  
11 to check for abnormal cells.

12 Q. And where would the DNA come from in a Pap smear?

13 A. As I stated earlier, any cell that -- any  
14 nucleated cell is going to have DNA. So any of  
15 the cells from the Pap smear, cervical area,  
16 tissue cells, it will come from the nucleus of  
17 those epithelial cells that are on that smear.

18 Q. Now, using the DNA technology that you described  
19 before lunch time, did you develop a DNA profile  
20 for Teresa Halbach, from that Pap smear?

21 A. Yes, I did.

22 Q. And I'm going to ask you, if according to your  
23 reports, does the slide we will put up next  
24 display your results?

25 A. Yes, it does.

1 Q. I would like you to take the laser pointer and at  
2 this point explain to the jurors exactly what  
3 they are looking at.

4 A. This series of numbers and letters on this side  
5 are referred to as genetic markers. And all of  
6 this information pinpoints where those genetic  
7 markers are found throughout your DNA. Earlier I  
8 talked about the target regions of DNA that are  
9 amplified, and we make a whole lot of copies of  
10 them.

11                   This is what I was referring to. We  
12 looked at 15 different target areas of DNA that  
13 are amplified. These numbers on the right side  
14 are the types at each one of those locations. So  
15 for instance, at D3S1358, Teresa Halbach's type  
16 is a 16 18.

17 Q. Are there other possible types at that genetic  
18 location of D3S1358?

19 A. Yes.

20 Q. Do you know how many different types there are at  
21 that location?

22 A. Not exactly, but probably something like 11 to  
23 20.

24 Q. Can you compare, for the jurors, when you talk  
25 about types, how these would be like ABO types?

1 A. These types are actually the different fragment  
2 sizes, those different target sizes that we  
3 amplified. The ABO system is a type of genetic  
4 marker, but the discriminating power of ABO  
5 systems, which is what we used many years ago, is  
6 much less than the discriminating power of the  
7 combined -- all of these combined types.

8 Q. Now, you previously testified that you collected  
9 your swab A-1 from the rear cargo area --

10 A. Yes.

11 Q. -- of the RAV4; is that correct?

12 A. Yes.

13 Q. Can we go to the next one, please. And, again,  
14 please show the jurors where you collected your  
15 A-1 from.

16 A. In this area right here.

17 Q. And that was a blood stain that tested positive  
18 in this presumptive test, correct?

19 A. Right.

20 Q. You also testified that you collected swab A-2  
21 from across the panel of the rear cargo area.  
22 Show the jurors, again, where that was.

23 A. Yes, that was right in this area here.

24 Q. And you also testified that you collected your  
25 swab A-4 from the metal frame. Show the jurors

1                   where that was.

2 A. Right along here.

3 Q. And you also testified that you collected A-3

4                   from the cargo door itself; is that correct?

5 A. Yes.

6 Q. And can you show the jurors where that is?

7 A. Right here.

8 Q. And, again, all of these stains, you had a

9                   presumptive positive test for blood?

10 A. That's correct.

11 Q. And you also testified that you collected a swab

12                   from the Wild Cherry Pepsi can which you labeled

13                   at A-14; is that correct?

14 A. Yes, right here.

15 Q. And, again, show the jurors. Thank you. Now,

16                   did you develop DNA profiles from each of these

17                   swabs?

18 A. Yes, I did.

19 Q. And according to the reports that you have, does

20                   the following slide correctly depict your

21                   results?

22 A. Yes, it does.

23 Q. And, again, would you explain to the jurors what

24                   this slide shows.

25 A. Again, these are the genetic markers, these are

1                   the 15 different markers we're looking at. And  
2                   these are the types that were developed from each  
3                   one of these evidence samples.

4   Q.   And each one of those evidence samples came from  
5                   the RAV4 of Teresa Halbach, correct?

6   A.   Correct.

7   Q.   Now, can you tell whether this particular DNA  
8                   profile is from a male or a female?

9   A.   Yes.

10   Q.   How can you do that?

11   A.   This marker here, referred to as amylogen, is a  
12                   gender marker. If you are female, you are only  
13                   going to have an X chromosome. If you are a  
14                   male, you will have a X and a Y chromosome.

15   Q.   So this profile is from a female?

16   A.   Correct.

17   Q.   I notice that after genetic marker D7SA20 there  
18                   is an 11?

19   A.   Correct.

20   Q.   Why is there only one number there?

21   A.   As I stated earlier, these genetic markers are  
22                   independently inherited, just like genes. So you  
23                   inherit 50 percent from your mom and 50 percent  
24                   from your dad. Now, the fact that this is an 11  
25                   means that she is a homozygote at this marker.

1           And that means she got the same type from her mom  
2           and the same type from her dad. At D-3 there are  
3           two markers. This is referred to as a  
4           heterozygote. And she received one from her mom  
5           and one from her dad.

6           Q. And this DNA profile that you developed from the  
7           cuttings and the swabs from the RAV4, did you  
8           compare that profile to the DNA profile that you  
9           developed from Teresa Halbach's Pap smear?

10          A. Yes, I did.

11          Q. And according to your reports, does this slide  
12           correctly display your findings?

13          A. Yes, sir, it does.

14          Q. Would you please point out to the jurors your  
15           findings and conclusions?

16          A. Again, these are all the genetic markers. And  
17           you can see that the types from the evidence  
18           samples are consistent with the types from the  
19           Pap smear of Teresa Halbach. So at this genetic  
20           marker, the evidence sample is 16 18, Teresa is  
21           16 18. At this marker it's 69.3, Teresa is a  
22           69.3. And all of these markers are consistent  
23           with the ones from Teresa Halbach.

24          Q. And did you calculate a statistic to determine  
25           how rare or how common this particular DNA

profile would be in the population?

A. Yes, I did.

Q. And I'm going to show you a slide and ask you if this correctly depicts the statistical analysis that you performed?

A. Yes, it does.

Q. And would you explain to the jurors what this slide means.

A. Remember earlier I said that we do a statistical analysis when we have a match between an evidence sample and a reference sample. If we have an exclusion, we're finished, that's the end of it. But if you have a match between an evidence sample and a reference sample, then you have to determine how common or how rare that match -- or I mean that profile from the evidence sample is in the population.

This first number here tells me that the probability of finding someone in the Caucasian population, some unrelated, random person that has the same profile as the evidence sample, the probability of that is 1 person in 416 quadrillion in the Caucasian population, 1 person in 642 quadrillion in the African-American population, 1 person in 641 quadrillion in the

1                   southeastern Hispanic population, and 1 person in  
2                   1 quintillion in the southwestern Hispanic  
3                   population.

4           Q.    And why do you look at these different  
5                   populations when you are estimating the frequency  
6                   of these genetic markers?

7           A.    When we are calculating and estimating these  
8                   frequencies, we use a data base that's maintained  
9                   by the FBI. And that data base has samples from  
10                  individuals in these four different population  
11                  groups. This slide illustrates that even though  
12                  the rarity of the profile is different, in these  
13                  four population groups, there's not a lot of  
14                  difference between population groups. There are  
15                  some differences, but this profile is extremely  
16                  rare across all four populations.

17           Q.    What does this number -- What do these numbers  
18                  mean, Ms Culhane?

19           A.    This number means that the probability of finding  
20                  a person, random person, unrelated, in the  
21                  population, that has the same profile as the  
22                  evidence sample, is 1 person in 416 quadrillion.

23           Q.    Do you have an opinion, to a reasonable degree of  
24                  scientific certainty, whether Teresa Halbach is  
25                  the source of the blood that you found on A-1,

1           A-2, A-3 and A-4, and the source of the  
2           biological fluid on the Wild Cherry Pepsi can?

3           A. Yes, I do.

4           Q. And what is that opinion?

5           A. That Teresa Halbach is the source of the DNA from  
6           those items.

7                   ATTORNEY GAHN: I'm going to ask Detective  
8                   Wiegert to bring you what has been marked as Exhibit  
9                   337.

10          Q. Again, I have spoken with defense counsel before  
11           we began this afternoon and, Ms Culhane, does  
12           that container, which is Exhibit 337, contain  
13           some charred remains that you examined in this  
14           case?

15          A. Yes, it does.

16          Q. And did you assign a Crime Lab designation number  
17           to that?

18          A. Yes, I did.

19          Q. What is that?

20          A. Item BZ.

21          Q. And I'm going to ask you to look on the slide on  
22           the big screen. And what is contained in that  
23           box there in front of you, which is Exhibit 337,  
24           is this the piece of charred remains that you  
25           examined?

1 A. Yes, it is.

2 Q. And when did you receive this; do you know?

3 A. I can refer to my notes.

4 Q. Please.

5 THE COURT: Do we have a number for the  
6 photo exhibit?

7 ATTORNEY GAHN: Your Honor, we don't have  
8 that with us, but you will get one.

9 A. Item BZ was taken into the laboratory on November  
10 11th, 2005.

11 Q. And was this -- When you examined this, was this  
12 a combination of bone and tissue?

13 A. It appeared to be, yes.

14 Q. And what is shown on the big screen here, which  
15 we will later get an exhibit for and mark it, is  
16 that the bone and tissue fragment sample that you  
17 examined?

18 A. Yes, it is.

19 Q. How did you go about processing this for DNA?

20 A. Because this sample was compromised, it had been  
21 subjected to -- appeared to be subjected to  
22 intense heat, I needed to find an area that I  
23 felt was the least damaged. So I chose a portion  
24 of the tissue, which I believe was in this area  
25 here, close to the bone. And sampled a portion

1                   of that to continue my extractions and to  
2                   continue my typing.

3   Q.   Were you able to develop a DNA profile from this  
4                   piece of charred remains?

5   A.   Yes, I was.

6   Q.   And according to your reports, does the next  
7                   slide correctly display your findings of your  
8                   test?

9   A.   Yes, it does.

10   Q.   Would you explain to the jurors what this is.

11   A.   Again, these are the genetic markers that we're  
12                   looking at. And these are the types. You will  
13                   notice here there are no numbers at these  
14                   positions, these markers. And the reason is  
15                   because this was a fairly degraded sample of DNA.  
16                   DNA is a very stable molecule; however, it breaks  
17                   down and is degraded and broken up into pieces by  
18                   several things, heat being one, sunlight,  
19                   nucleases in the environment that chew it up.

20                   But this was obviously a sample that had  
21                   been subjected to intense heat. And so,  
22                   therefore, on these fragments, these STR markers,  
23                   which are fairly large, the fragments -- there  
24                   was not enough DNA at those positions to develop  
25                   a type.

1 Q. Did you compare this partial profile with the DNA  
2 profile that you obtained from the Pap smear of  
3 Teresa Halbach?

4 A. Yes, I did.

5 Q. And does this slide accurately depict your  
6 findings?

7 A. Yes.

8 Q. And would you please explain what your findings  
9 were, to the jury?

10 A. In the -- At the marker positions where I did get  
11 results, these types are consistent with Teresa.  
12 Obviously, I don't know what the types are here  
13 because there were no results. But for  
14 everything else, all the types that I actually  
15 developed, they were consistent with Teresa  
16 Halbach.

17 Q. Now, you stated previously, when you made your  
18 comparisons to Teresa Halbach's DNA profile with  
19 the samples of blood that you found in the RAV4,  
20 you were able to determine that Teresa Halbach  
21 was the source of that blood; is that correct?

22 A. Yes.

23 Q. Can you say that in this case?

24 A. No.

25 Q. Why not?

1       A. This was a partial profile. When we have a  
2           partial profile, we can only do a statistical  
3           interpretation on the markers that we have  
4           results for. In order to get very large numbers  
5           and very rare profiles, what gives us those large  
6           numbers is results, at all 15 different markers.  
7           When we have less than that, then the frequency  
8           of that profile becomes a little more common than  
9           it would if it was a complete profile.

10      Q. Were you able to develop a statistic to tell you  
11           how rare or how common the DNA profile on Item  
12           BZ, the charred remains, would be in the  
13           population?

14      A. Yes, I was.

15      Q. And does the next slide depict the frequency in  
16           the population of the DNA profile on the charred  
17           remains?

18      A. Yes.

19      Q. And would you explain to the jury these numbers  
20           and what they mean.

21      A. This calculation was done exactly like the  
22           calculation from the blood stains. The  
23           difference is, this was not a full profile, it  
24           was only a partial profile. So if you do a  
25           statistical analysis of the types that you got,

1 and calculated the frequency of those types, the  
2 probability of another random, unrelated person,  
3 in the population, having the profile, the  
4 partial profile of the remains, is 1 person in  
5 1 billion in the Caucasian population, 1 person  
6 in 2 billion in the African/American population,  
7 1 person in 2 billion in the southeastern  
8 Hispanic population; and 1 person in 3 billion in  
9 the southwestern Hispanic population.

10 Q. And, again, can you break this down for the  
11 jurors, exactly what that number, one billion,  
12 would mean, as it relates to this DNA profile  
13 from the charred remains?

14 A. That is the frequency that that partial profile,  
15 those results at just the markers that I got  
16 results from, the frequency of that partial  
17 profile, that is the frequency that it occurs in  
18 the population.

19 Q. Are there a billion people in the State of  
20 Wisconsin?

21 A. I don't believe so.

22 ATTORNEY GAHN: Your Honor, I have now what  
23 has been a photograph that has been marked as  
24 Exhibit 338. I will ask Mr. Fallon if he will give  
25 that to Ms Culhane.

1 Q. And Ms Culhane, would you look at that  
2 photograph, and is that a photograph of the piece  
3 of charred remains that we previously put up on  
4 the large screen.

5 A. Yes, it is.

6 ATTORNEY GAHN: I would ask if Detective  
7 Wiegert would bring you Exhibit 237 -- I'm sorry,  
8 277. This would be the bullet fragment.

9 Q. And can you identify that exhibit that's in front  
10 of you, Ms Culhane?

11 A. Yes, this is Crime Lab item designation FL. And  
12 it is a lead bullet fragment. My initials and  
13 markings are on the packaging.

14 Q. And can you tell when you received that exhibit?

15 A. That came into the laboratory on May 16 -- I'm  
16 sorry, March 16th, 2006, and I took custody on  
17 March 28th, 2006.

18 Q. And how did you process that bullet?

19 A. The first thing I did was, just like every item  
20 of evidence, it was a visual examination. There  
21 was nothing visual on the fragment. There didn't  
22 appear to be any stain. So in order to remove  
23 any residual DNA that might have been on the  
24 bullet, I washed it. I put it in a test tube and  
25 washed it with some buffer that we use to extract

1                   the DNA. And the washing of that bullet, the  
2                   washing liquid is what I performed the rest of my  
3                   procedure on.

4           Q. And were you able to develop a DNA profile from  
5                   that washing on Item FL, the bullet?

6           A. Yes.

7           Q. And according to your reports, does the next  
8                   slide correctly display your findings?

9           A. Yes, it does.

10          Q. And would you please explain your results to the  
11                   jurors?

12          A. Again, I was looking at all of these. These are  
13                   the different markers. And these are the types  
14                   at each one of these markers. You will notice at  
15                   D-16 and at TPOX I am -- there's an asterisk  
16                   there. That indicates that there was a visible  
17                   peak there which represents a type. But it was  
18                   below our parameters for including that in the  
19                   final analysis. So it -- I'm missing a peak here  
20                   and a peak at TPOX.

21          Q. And did you compare this profile that you  
22                   obtained from the bullet fragment with the DNA  
23                   profile you obtained from the Pap smear of Teresa  
24                   Halbach?

25          A. Yes, I did.

1 Q. And according to your reports, does this slide  
2 correctly display your findings?

3 A. Yes, it does.

4 Q. And would you explain them to the jury.

5 A. The profile from the bullet is consistent with  
6 all of the types from Teresa Halbach. You will  
7 notice at D16 she's missing the 13 type, and at  
8 TPOX she is missing the 10 type. And, again,  
9 those peaks were visible, but they were below our  
10 threshold for calling those types.

11 Q. Did that have any impact on your match criteria  
12 in this interpretation?

13 A. The impact is that I cannot use the information,  
14 the frequencies at this marker, and at this  
15 marker, to figure out my final frequency. In  
16 other words, I had to calculate the frequencies  
17 at all of the other markers except D16 and TPOX.

18 Q. But nothing about those two asterisks that you  
19 have on your -- on the chart here excluded Teresa  
20 Halbach as being on the bullet?

21 A. That's correct.

22 Q. Did this match differ in any way from the  
23 previous matches that you called?

24 A. Yes, it did.

25 Q. And could you explain to the jury what happened.

1       A. During the extraction of this item of evidence,  
2               as I talked about earlier, we set up controls  
3               that we run with all of our samples. When we  
4               begin an extraction, whether it is an evidence  
5               sample or a reference sample, when we begin the  
6               extraction, we begin what's called a manipulation  
7               control. And it's, basically, a negative blank  
8               control. And its helps us monitor if any  
9               unintentional DNA is introduced into the sample  
10              or into the process.

11              In this particular case, there was a  
12              trace amount of -- a trace amount of DNA showed  
13              up in the quantitation portion where I had to  
14              quantitate and find out how much DNA I had.  
15              There was a trace amount of DNA in the negative  
16              control. I took the profile to completion and I  
17              developed the profile on it. And the profile in  
18              the negative control turned out to be consistent  
19              with my own DNA type.

20       Q. What did that mean?

21       A. That means that during the extraction procedure I  
22              inadvertently introduced my own DNA into the  
23              negative control.

24       Q. Did that have any impact on your interpretation  
25              of your results?

1 A. It did not have any impact as far as the profile  
2 from the evidence sample. It's just the fact  
3 that I introduced my own DNA into the  
4 manipulation control.

5 Q. Were there any other profiles developed on the  
6 bullet besides Teresa Halbach?

7 A. No.

8 Q. Was Teresa Halbach's profile the only profile  
9 that you found on that bullet?

10 A. Yes.

11 Q. Were there any mixtures?

12 A. No.

13 Q. And your profile was found where?

14 A. In the negative control, which should have had  
15 just reagents in it. It should not have had any  
16 DNA at all in it.

17 Q. And how do you think your DNA profile got into  
18 that control?

19 A. I believe my DNA profile was introduced during  
20 the extraction procedure when I was talking. At  
21 the time when I was setting up these samples, I  
22 was training two analysts, newer analysts, in the  
23 lab. And they were watching me. This sample was  
24 not an average sample, simply because we handled  
25 it a little different. It wasn't a swabbing and

1                   it wasn't a cutting. The washing part of it was  
2                   a little bit different than what we usually do.

3                   So I was explaining to them what I was  
4                   doing and as I was setting it up. And  
5                   apparently -- I felt as if I was far enough away  
6                   from my workbench not to introduce my DNA, but  
7                   apparently I was incorrect.

8   Q.   Now, your DNA did not come up on the bullet, did  
9                   it?

10   A.   No.

11   Q.   It only was in the control?

12   A.   That's correct.

13   Q.   Do you have an opinion, to a reasonable degree of  
14                   scientific certainty, whether Teresa Halbach is  
15                   the source of the DNA on Item FL, the bullet?

16   A.   Yes.

17   Q.   And what is that opinion?

18   A.   I believe she is the source of the DNA on that  
19                   bullet.

20                   ATTORNEY GAHN: I would ask if Detective  
21                   Wiegert would, please, bring to Ms Culhane what's  
22                   been marked as Exhibit 324, and this would be the  
23                   buccal swab of Steven Avery.

24                   Your Honor, before I go any further, I  
25                   think we have some considerable more testimony

1 for the rest of these samples. Would you like to  
2 break now?

3 THE COURT: I think we'll go another 15  
4 minutes to kind of split the afternoon equally in  
5 two.

6 ATTORNEY GAHN: Okay.

7 Q. (By Attorney Gahn)~ Detective Wiegert has brought  
8 you what has been marked as Exhibit 324, and that  
9 is what you identified as the buccal swab of  
10 Steven Avery?

11 A. Yes.

12 Q. And once again, that's what's called a standard,  
13 correct?

14 A. Correct.

15 Q. And what are standards used for?

16 A. As reference samples to compare to the evidence  
17 samples.

18 Q. Using the DNA testing procedures that you  
19 described this morning, did you develop a DNA  
20 profile from the buccal swab of Steven Avery?

21 A. Yes, I did.

22 Q. And does the next slide correctly depict the DNA  
23 profile that you developed from Steven Avery's  
24 buccal swab?

25 A. Yes, it does.

1 Q. And would you describe for the jurors your  
2 findings?

3 A. These are the same genetic markers that I  
4 examined when I looked at the evidence samples  
5 and the standard from Teresa Halbach. And,  
6 again, at each one of these markers, Steven  
7 Avery's sample had a specific type. The  
8 amelogenin marker is XY, which is different from  
9 Teresa because this is a male individual. And he  
10 has the X and Y chromosome.

11 Q. We heard testimony yesterday that a number of  
12 swabs were taken from the garage floor of Steven  
13 Avery. And did you receive, at the Crime Lab,  
14 swabs that were taken from the garage floor of  
15 Steven Avery's garage?

16 A. Yes, I did.

17 Q. And did you assign Crime Lab designation numbers  
18 G, I1, J, K, O, and P to six of the swabs from  
19 the stains on the garage floor of Steven Avery's  
20 garage?

21 A. Yes, I did.

22 Q. And did you test those swabs from Steven Avery's  
23 garage floor --

24 A. Yes.

25 Q. -- for a DNA profile? And did you obtain a DNA

1 profile?

2 A. Yes, I did.

3 Q. And does the next slide correctly show the DNA  
4 profile that you obtained from the six swabs of  
5 blood from the garage floor?

6 A. Yes, it does. And, again, you can see that the  
7 types are consistent throughout all of the  
8 markers that we looked at.

9 Q. Now, did you receive other items? We have had  
10 testimony in this case that blood stains from the  
11 sink or the vanity in the residence of Steven  
12 Avery were taken and sent to the Crime Lab; do  
13 you recall that?

14 A. Yes.

15 Q. And do you recall submitting those to DNA  
16 testing?

17 A. Yes.

18 Q. And did you develop a profile from those  
19 submissions?

20 A. Yes, I did.

21 Q. And what was the profile you developed?

22 A. It was consistent with Steven Avery's profile.

23 Q. And I'm going to show you the next slide. And  
24 this has been identified as the Grand Am, the  
25 1993 Grand Am owned by Steven Avery. Did you

1                   also examine this at your Crime Lab?

2   A. Yes, I did.

3   Q. And on the next slide, can you point out to the  
4                   jurors, did you locate any bloodstains in that  
5                   vehicle?

6   A. Yes, there were bloodstains on the gear shaft  
7                   here and along the console.

8   Q. And did you do presumptive tests on those  
9                   bloodstains?

10   A. Yes, I did.

11   Q. And did you eventually do DNA testing on those  
12                   bloodstains?

13   A. Yes.

14   Q. And what were your results?

15   A. The types were consistent with Steven Avery.

16   Q. We had testimony a few days ago that there was a  
17                   swab taken of the release lever of the hood latch  
18                   of Teresa Halbach's RAV4. That was identified as  
19                   Exhibit 205.

20                   ATTORNEY GAHN: Will you find that exhibit,  
21                   please, Detective Wiegert.

22   Q. Can you identify that exhibit, Ms Culhane?

23   A. Yes, this is our item designation ID, and it has  
24                   our laboratory bar code item designation and my  
25                   initial and date on it.

1 Q. And that contains a swab from the hood latch of  
2 Teresa Halbach's RAV4?

3 A. Yes.

4 Q. And did you perform DNA testing on that hood  
5 latch --

6 A. Yes.

7 Q. -- swab? Do you recall, when you looked at the  
8 swab, did you notice any condition to it, as far  
9 as color?

10 A. It was discolored, but it did not have the  
11 appearance -- it was not a reddish-brown  
12 discoloration consistent with blood.

13 Q. So it did not appear to have blood on the swab?

14 A. Correct.

15 Q. But you proceeded with DNA testing on the swab,  
16 nevertheless?

17 A. Yes.

18 Q. And did you develop a profile from the swab of  
19 the hood latch of Teresa Halbach's RAV4?

20 A. Yes, I did.

21 Q. And I'm going to show you the next slide and ask  
22 you, do your notes and your records reflect these  
23 as your findings?

24 A. Yes, they do.

25 Q. Could you explain what your findings were to the

1 jury.

2 A. Looking at the same genetic markers, these are  
3 the types that were developed from the swab that  
4 was reportedly taken from the hood latch of the  
5 RAV4.

6 Q. And this is what you would call a full profile;  
7 is that correct?

8 A. Yes.

9 Q. What does that mean when you say it is a full,  
10 complete profile?

11 A. A full profile indicates that you have gotten  
12 results at all 15 different markers that we look  
13 at. If this was a partial profile, such as in  
14 the charred remains, I would be missing types at  
15 some of these markers.

16 Q. Did you compare this profile that you found on  
17 the swab of the hood latch of Teresa Halbach's  
18 RAV4 with the DNA profile that you developed from  
19 the buccal swab of Steven Avery?

20 A. Yes, I did.

21 Q. And does this next slide correctly display your  
22 findings?

23 A. Yes, it does.

24 Q. And would you please describe your findings to  
25 the jurors?

1       A. At each one of the markers, the types from the  
2       swabbing on the hood latch were consistent with  
3       the types from Steven Avery's buccal swab. If  
4       you look at all the numbers for all of the  
5       markers, they are consistent with the entire  
6       profile.

7       Q. Now, you testified before that you received a  
8       number of standards at the Crime Lab, did you?

9       A. Yes.

10      Q. In other words, you received buccal swabs from  
11       Allen Avery, Brian Dassey, Brendan Dassey, Barb  
12       Janda, Bobby Dassey, Earl Avery, Chuck Avery and  
13       Delores; is that correct?

14      A. Yes.

15                   THE COURT: Mr. Gahn, excuse me, after you  
16       wrap up this portion of the hood latch, I think  
17       we'll take our break.

18                   ATTORNEY GAHN: Yes, your Honor. Fine.

19                   Thank you.

20      Q. (By Attorney Gahn)~ Did you develop DNA profiles  
21       from all those standards of reference samples?

22      A. Yes, I did.

23      Q. When you would come up with a profile from an  
24       evidentiary item like the hood latch, did you  
25       compare the profile from the hood latch with all

1                   the other standards?

2   A.  Yes, I did.

3   Q.  And what were the results?

4   A.  They were inconsistent.  The profile from the  
5       hood latch was not consistent with any of the  
6       other standards that I examined.

7   Q.  But the profile from the hood latch matches  
8       Steven Avery?

9   A.  That's correct.

10   Q.  And do you have an opinion, to a reasonable  
11       degree of scientific certainty, whether the DNA  
12       profile that you developed from the swab of the  
13       hood latch of Teresa Halbach's RAV4, that Steven  
14       Avery is the source of that profile?

15   A.  Yes.

16   Q.  And what is that opinion?

17   A.  That he is the source of that profile.

18                   ATTORNEY GAHN:  Thank you.

19                   THE COURT:  All right.  Thank you.  Members  
20       of the jury, we're going to take our afternoon break  
21       at this time.  We'll resume a little before 3:00.  I  
22       will remind you, again, not to discuss the case at  
23       any time during the break.

24                   (Jury not present.)

25                   THE COURT:  Counsel, let's report back a

1                   little before 3:00.

2                   (Recess taken.)

3                   THE COURT: Counsel, before we bring the  
4                   jury back in, I just wanted to get some idea of the  
5                   agenda for the rest of the day. Mr. Gahn, how long  
6                   do you think you will be with direct?

7                   ATTORNEY GAHN: I think at least a half  
8                   hour, possibly 40, 45 minutes. But I don't think  
9                   not before a half hour, I don't believe.

10                  THE COURT: All right. And, Mr. Buting, I  
11                  take it you may well not complete your  
12                  cross-examination, but you wish to get started?

13                  ATTORNEY BUTING: I wouldn't even come  
14                  close to completing the examination. Normally, I  
15                  guess I wouldn't mind starting and finishing it if  
16                  it was the next day, but I think with a whole break  
17                  of a weekend, it might be easier, if the Court  
18                  didn't mind ending a little early today, if we would  
19                  just start fresh with cross on Monday morning.

20                  THE COURT: Okay. Before I answer that,  
21                  does the State have any shorter, quicker witnesses.

22                  ATTORNEY KRATZ: I'm finding out right now,  
23                  Judge. We have some examination with Mrs. Halbach,  
24                  Karen Halbach, that we would be happy to put in  
25                  today.

1 ATTORNEY BUTING: Could we approach for a  
2 moment, please.

3 THE COURT: Go ahead.

4 (Side bar taken.)

5 THE COURT: All right. Before we go back,  
6 I should announce we just had a side bar conference  
7 and I think the feeling is that if the direct  
8 examination ends a little early today, we'll  
9 probably simply let the jury go home a little early.

10 There was a side bar earlier this  
11 morning where counsel asked the Court if the  
12 other jurors knew why one of the jurors was  
13 missing today. And the answer to that is, yes,  
14 they learned that this morning when they were  
15 leaving on the bus. And that was the purpose for  
16 that brief side bar we had earlier today. All  
17 right. At this point we'll bring in the jury.

18 (Jury present.)

19 THE COURT: You may be seated. And,  
20 Mr. Gahn, you may resume your direct examination of  
21 the witness.

22 ATTORNEY GAHN: Thank you, your Honor.

23 **DIRECT EXAMINATION CONTD.**

24 ATTORNEY GAHN: I would ask if Detective  
25 Wiegert could retrieve Exhibit 211, which is the

1           Toyota key. Please take that to Ms Culhane.

2 BY ATTORNEY GAHN:

3 Q. We have presented you with an exhibit that has  
4 previously been marked as Exhibit 211, and  
5 previously identified as a Toyota key that was  
6 found in Steven Avery's residence. And I ask  
7 you, do you recognize that key?

8 A. Yes, I do.

9 Q. And how do you recognize that key?

10 A. It's the Toyota key that I examined. There was a  
11 -- This is the same keyring that it was attached  
12 to.

13 Q. We also have, on the next slide, a photograph  
14 that -- is that key that you have in front of  
15 you, Exhibit 211, the key that is in this  
16 photograph?

17 A. Yes, it is.

18 Q. There is also another item in that photograph,  
19 and does that help you identify the key?

20 A. Yes, it does.

21 Q. And, please, explain that to the jury.

22 A. This is the packaging that the key was brought to  
23 the laboratory in. Again, this is our bar code  
24 tracking system in the laboratory. And this is  
25 our item designation C, and my initials, and the

1 date.

2 Q. I'm going to show you what has been marked as  
3 Exhibit 316 and ask you if this photograph, which  
4 you are being shown, is the photograph that is  
5 depicted on the large screen?

6 A. Yes, it is.

7 Q. And now, I would like to go to the next slide.

8 And this is a slide of the key that you have in  
9 front of you; is that correct?

10 A. It appears to be, yes.

11 Q. When you received this key, how did you process  
12 it, Ms Culhane?

13 A. I received the key. It was in a sealed brown  
14 paper bag. I opened it up. I had gloves on.  
15 And I held the metal part of the key in one hand  
16 and I swabbed the black -- I should show you up  
17 here -- this black rubberized part of the key,  
18 with a sterile cotton swab. And I did it in very  
19 much the same way that I swabbed the Pepsi can  
20 that we looked at earlier.

21 At this point, there were no visible  
22 indications of any staining, so I was primarily  
23 interested to see if I could recover DNA that had  
24 been left behind by possibly touching. So I  
25 swabbed all of the surfaces, the front and back,

1 and the edges of the key, and that's what I did  
2 my analysis on.

3 Q. After you did the swabbing of the key, did you do  
4 anything else with the key?

5 A. Yes, I did.

6 Q. Please explain to the jurors what you do with the  
7 key.

8 A. I took the key to see if it fit the vehicle. So  
9 I put the key into the ignition. I still had, of  
10 course, gloves on, during this entire process. I  
11 put the key into the ignition and turned the  
12 ignition. It did turn the ignition, but it did  
13 not crank the car. And I later learned that that  
14 was because, I believe, the battery had been  
15 disconnected. But it did actually turn  
16 completely over. I also locked, I believe it was  
17 the front driver's side door, and used the key to  
18 unlock the door.

19 Q. The buccal swab that you took of this key, did  
20 you submit that to DNA testing?

21 A. Yes, I did.

22 Q. And were you able to develop a profile from the  
23 swabbing of Item C, the key to Teresa Halbach's  
24 car?

25 A. Yes.

1 Q. And does this slide clearly and correctly show  
2 your findings?

3 A. Yes, it does.

4 Q. Would you explain to the jury your findings.

5 A. Again, we looked at the same 15 markers. And at  
6 each one of these markers I developed a type.  
7 And that is the profile that characterizes the  
8 swabbing that I took from the key.

9 Q. And, again, this profile that you developed from  
10 the key, is that a profile that came from a male  
11 individual?

12 A. Yes, it is. And that's -- We have an X and a Y  
13 chromosome which indicate the male individual.

14 Q. And did you compare the profile that you  
15 developed from your swabbing of this key with the  
16 DNA profile that you developed from the buccal  
17 swab of Steven Avery?

18 A. Yes, I did.

19 Q. And does this next slide correctly show your  
20 findings?

21 A. Yes, it does.

22 Q. And, again, would you explain your findings to  
23 the jury.

24 A. The same 15 markers, these are the types at each  
25 one of these markers. And you can see at every

1           type, the type from the evidence -- or the  
2           profile from the evidence sample is consistent  
3           with the profile from Steven Avery.

4   Q.   And, again, Ms Culhane, the profile that you  
5           developed from Item C, the key, is that what you  
6           refer to as a full, complete DNA profile?

7   A.   Yes.

8   Q.   And why is that, again?

9   A.   Because we have types at each one of these  
10           markers. There are types present at each one of  
11           the markers.

12   Q.   And, again, did you compare this profile with the  
13           DNA profiles that you developed from all the  
14           standards that were submitted in this case?

15   A.   Yes, I did.

16   Q.   In other words, did you compare the DNA profile  
17           that you found on Item C with the DNA profile  
18           from the buccal swab of Allen Avery?

19   A.   Yes.

20   Q.   And Brian Dassey?

21   A.   Yes.

22   Q.   And Brendan Dassey?

23   A.   Yes.

24   Q.   And Barb Janda?

25   A.   Yes.

1 Q. And Bobby Dassey?

2 A. Yes.

3 Q. And Earl Avery?

4 A. Yes.

5 Q. And Chuck Avery?

6 A. Yes.

7 Q. And Delores Avery?

8 A. Yes, I did.

9 Q. And did the DNA profile that you developed from  
10 Item C, the key, match any of those standards?

11 A. No, it did not.

12 ATTORNEY GAHN: At this time, I'm going to  
13 ask Detective Wiegert if he can, please, retrieve  
14 for me the photograph of the RAV4 -- I'm looking for  
15 the photograph, I'll give you a exhibit number in  
16 just one second -- Exhibit 290, 294, 291, and 292,  
17 please.

18 Q. Ms Culhane, would you find Exhibit 290.

19 A. 290?

20 Q. 290.

21 A. No, I have 291, 292 and 294.

22 Q. Do you have that?

23 A. Yes, I do.

24 Q. And I apologize for the delay here. Is that  
25 photograph depicted on the large screen here?

1 A. Yes, it is.

2 Q. Now, you previously testified that you took

3 cuttings which you identified as Item A-6 from

4 the RAV4?

5 A. Correct.

6 Q. Can you show the jurors where it was you took the

7 cuttings?

8 A. In the front driver's seat, right about here.

9 Q. And those were the cuttings of a stain that you

10 had tested for blood with the presumptive test?

11 A. Yes.

12 Q. And I also believe that you testified earlier

13 that you collected your Item No. A-7 from the

14 center console area of the RAV for, would you

15 point that out to where that was for the jurors.

16 A. Right along the floor here by the console.

17 Q. Okay. And did you perform DNA testing on those

18 two evidentiary samples?

19 A. Yes, I did.

20 Q. And did you develop a DNA profile for the blood

21 stain on Item A-6?

22 A. Yes, I did.

23 Q. And according to your reports, does the next

24 slide correctly depict the DNA findings?

25 A. Yes, it does.

1 Q. And, again, would you explain those to the  
2 jurors.

3 A. Again, these are the same 15 markers and these  
4 are the types at each one of these markers that  
5 were developed from the cutting of the stain in  
6 the driver's seat of the RAV4.

7 Q. And, again, is this what you consider to be a  
8 complete full DNA profile?

9 A. Yes.

10 Q. And did you also compare this profile to the DNA  
11 profile that you developed from the buccal swab  
12 of Steven Avery?

13 A. Yes, I did.

14 Q. And does this slide correctly display your  
15 findings?

16 A. Yes, it does.

17 Q. And would you explain your findings to the jury?

18 A. Again, this is the profile developed from the  
19 evidence sample. You can tell it's from a male  
20 individual. All of the types are consistent with  
21 each one of the types, at each marker, from the  
22 reference standard of Steven Avery.

23 Q. And the DNA profile that you found in Item A-6,  
24 the bloodstain, did you compare that to the other  
25 standards that you received at the lab?

1 A. Yes, I did.

2 Q. And how did this profile compare to the other  
3 standards?

4 A. It was not consistent with any of the other  
5 standards that I examined.

6 Q. It was only consistent with the DNA profile of  
7 Mr. Steven Avery?

8 A. That's correct.

9 Q. Did you develop a DNA profile from your Item No.  
10 A-7, which were the blood crusts by the center  
11 console?

12 A. Yes.

13 Q. And does the following slide show your findings?

14 A. Yes, it does.

15 Q. And would you explain those to the jurors.

16 A. Again, at each genetic marker, these are the  
17 types. At D-5, this asterisk here indicates that  
18 there was a peak there, a visible peak, but it  
19 was below the parameters of our system. So that  
20 would not be included in the statistical  
21 interpretation of this sample -- of this profile.

22 Q. Now, that's only not included in the statistical  
23 analysis, correct?

24 A. Correct.

25 Q. Now, the fact that that asterisk was there, did

1 not have any impact in your interpretation of  
2 this profile as it compared to Steven Avery, did  
3 it?

4 A. No.

5 Q. And did you compare this profile to Steven  
6 Avery's profile?

7 A. Yes, I did.

8 Q. And does this slide correctly show your findings?

9 A. Yes, it does. And, again, you can see that the  
10 profile is consistent with Steven Avery at every  
11 genetic marker.

12 Q. Do you have an opinion, to a reasonable degree of  
13 scientific certainty, whether Steven Avery is the  
14 source of the blood stain on Item A-6, which was  
15 the stain found on the driver's passenger seat?

16 A. Yes, I do.

17 Q. And what is that opinion?

18 A. That Steven Avery is the source of that profile.

19 Q. And do you have an opinion, to a reasonable  
20 degree of scientific certainty, whether Steven  
21 Avery is the source of the DNA profile that you  
22 found on Item A-7, the blood crusts by the center  
23 console?

24 A. Yes, I do.

25 Q. And what is that opinion?

1 A. That Steven Avery is consistent with that  
2 profile.

3 Q. Do you have Exhibit 293 in front of you?

4 A. No, I'm sorry, I don't.

5 Q. I'm sorry. Do you have that now?

6 A. Yes.

7 Q. Is that photograph the same photograph that is up  
8 on the big screen?

9 A. Yes, it is.

10 Q. Now, you previously testified that you collected  
11 a cutting which you identified as Item A-9 of a  
12 bloodstain from the front passenger seat of  
13 Teresa Halbach's RAV4. Can you show the jurors  
14 where that cutting was, once more.

15 A. Yes, right in this area here.

16 Q. And did you perform a DNA test on that cutting?

17 A. Yes, I did.

18 Q. And according to your reports, does the following  
19 slide correctly display your results?

20 A. Yes, it does.

21 Q. Could you explain them to the jurors.

22 A. These are the exact same markers that we looked  
23 at in each sample. And, again, there are types  
24 at each one of these markers, and XY depicting a  
25 male individual.

1 Q. And, again, is this what you call a complete full  
2 profile?

3 A. Yes, it is.

4 Q. And did you compare the profile that you  
5 developed from the bloodstain from the front  
6 passenger seat of Teresa Halbach's car with the  
7 DNA profile that you obtained from the buccal  
8 swab of Steven Avery?

9 A. Yes, I did.

10 Q. And does this next slide show your findings?

11 A. Yes, it does.

12 Q. And would you explain them to the jury, too,  
13 please.

14 A. This is the profile developed from the cutting in  
15 the passenger -- the front passenger seat. And  
16 this is the profile from Steven Avery's buccal  
17 swab. And you can see it's consistent at all of  
18 the 15 genetic markers.

19 Q. Do you have an opinion, to a reasonable degree of  
20 scientific certainty, whether Steven Avery is the  
21 source of the bloodstain that was found on Item 9  
22 on the front passenger seat of Teresa Halbach's  
23 RAV4?

24 A. Yes, I do.

25 Q. And what is that opinion?

1 A. That Steven Avery is the source of that stain,  
2 A-9.

3 Q. All right. Now, you also previously testified  
4 that you collected the swab from what was Item  
5 A-10, that is the CD case that was on the front  
6 seat of Teresa Halbach's car, correct?

7 A. Yes.

8 Q. And did you develop a DNA profile from the blood  
9 stain on the CD case?

10 A. Yes, I did.

11 Q. And does the next slide correctly show your  
12 findings?

13 A. Yes, it does.

14 Q. Did you compare this profile with the profile  
15 that you developed from the buccal swab of Steven  
16 Avery?

17 A. Yes, I did.

18 Q. And does this next slide correctly show your  
19 findings according to your reports?

20 A. Yes, it does. Again, you can see all of the  
21 types are exactly the same through all the  
22 genetic markers.

23 Q. And do you have an opinion, to a reasonable  
24 degree of scientific certainty, whether Steven  
25 Avery is the source of the blood that you found

1           on the CD case in Teresa Halbach's SUV?

2   A.  Yes, I believe he is the source of the blood

3           stain, Item A-10.

4   Q.  Ms Culhane, do you have Exhibit 294 in front of

5           you?

6   A.  Yes, I do.

7   Q.  And does that photograph -- is that depicted on

8           the large screen here?

9   A.  Yes, it is.

10   Q.  Now, you previously testified that you collected

11           a bloodstain from the paneling of the rear

12           passenger door.  And would you point out to the

13           jurors, one more time, where that bloodstain was?

14   A.  This area right here.

15   Q.  Yes.  And you designated that as Crime Lab

16           designation Item A-12; is that correct?

17   A.  Yes.

18   Q.  And did you perform DNA testing on Item A-12?

19   A.  Yes, I did.

20   Q.  And did you develop a DNA profile from the

21           testing of that bloodstain?

22   A.  Yes, I did.

23   Q.  And does the next slide correctly show your

24           findings?

25   A.  Yes, it does.

1 Q. And, again, did you compare the profile, the DNA  
2 profile that you developed from the bloodstain on  
3 the rear passenger door of Teresa Halbach's RAV4,  
4 with the DNA profile that you obtained from the  
5 buccal swab of Steven Avery?

6 A. Yes, I did.

7 Q. And does this slide correctly show your findings?

8 A. Yes, it does. And, again, you can see, at each  
9 one of the markers, the types are consistent.

10 Q. I would ask you if you have in front of you  
11 Exhibit 291.

12 A. Yes, I do.

13 Q. And is that photograph shown on the big screen  
14 now?

15 A. Yes, it is.

16 Q. Now, you previously testified that you collected  
17 this bloodstain on the dashboard of Teresa  
18 Halbach's RAV4, by the ignition switch; is that  
19 correct?

20 A. Yes.

21 Q. And this -- you did a presumptive test for blood  
22 on that stain?

23 A. Yes, I did.

24 Q. And did you perform DNA testing on this  
25 bloodstain in Teresa Halbach's vehicle?

1 A. Yes.

2 Q. And did you develop a DNA profile from that

3 bloodstain?

4 A. Yes, I did.

5 Q. And does this next slide correctly show your

6 findings?

7 A. Yes, it does.

8 Q. And did you compare the DNA profile from that

9 bloodstain with the DNA profile of Steven Avery?

10 A. Yes, I did.

11 Q. And does this next slide show your results?

12 A. Yes, it does.

13 Q. And, again, would you explain what those were to

14 the jury.

15 A. This is the profile from A-8, which is the stain

16 by the ignition. And this is the profile from

17 Steven Avery's buccal swab. And you can see at

18 each one of the markers, the types are

19 consistent.

20 Q. And, once again, is this what you consider a full

21 complete DNA profile?

22 A. Yes, it is.

23 Q. And the DNA profile that you developed from Item

24 A-8, the blood stain found near the ignition of

25 Teresa Halbach's SUV, did you compare that

1 profile with the profiles that you developed from  
2 all the other standards in this case?

3 A. Yes, I did.

4 Q. And what were your results?

5 A. It was not consistent with any of the other  
6 standards.

7 Q. It was only consistent with the DNA profile of  
8 Steven Avery?

9 A. Correct.

10 Q. Did you arrive at a statistical number for this  
11 profile that would reflect how often, or how  
12 rare, or how common, this profile would be in the  
13 population?

14 A. Yes, I did.

15 Q. And I would ask if this slide correctly displays  
16 that statistic?

17 A. Yes, it does.

18 Q. And could you explain to the jurors what that  
19 statistic is?

20 A. This number tells me that the probability of  
21 another unrelated, random person in the  
22 population, having the same profile as the  
23 evidence samples that we just talked about, is 1  
24 person in 4 quintillion in the Caucasian  
25 population, 1 person in 898 quintillion in the